

2

OIEP

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001
 TIME: 13:04:47

Input Set : A:\ES.txt
 Output Set: N:\CRF3\08272001\I931704.raw

ENTERED

3 <110> APPLICANT: Senaldi, Giorgio
 5 <120> TITLE OF INVENTION: Methods and Compositions for Treating IgE-Related Disease
 Using NNT-1

6 Inhibitors
 8 <130> FILE REFERENCE: A-695
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/931,704
 11 <141> CURRENT FILING DATE: 2001-08-16
 13 <150> PRIOR APPLICATION NUMBER: US 60/226,436
 14 <151> PRIOR FILING DATE: 2000-08-18
 16 <160> NUMBER OF SEQ ID NOS: 5
 18 <170> SOFTWARE: PatentIn version 3.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 797
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Homo sapiens
 25 <220> FEATURE:
 26 <221> NAME/KEY: CDS
 27 <222> LOCATION: (90)..(764)
 28 <223> OTHER INFORMATION:
 31 <220> FEATURE:
 32 <221> NAME/KEY: mat_peptide
 33 <222> LOCATION: (171)..()
 34 <223> OTHER INFORMATION: Met at -27
 37 <400> SEQUENCE: 1

ENTERED

38 attaaagctt cgccggagcc ggcgtcgcc etcccaactcc gccagcctcc gggagaggag	60
40 cgcacccggy ccggccagcc cccagccccc atg gac ctc cga gca ggg gac tcg	113
41 Met Asp Leu Arg Ala Gly Asp Ser	
42 -15 -20	
44 tgg ggg atg tta gcg tgc ctg tgc acg gtg ctc tgg cac ctc cct gca	161
45 Trp Gly Met Leu Ala Cys Leu Cys Thr Val Leu Trp His Leu Pro Ala	
46 -15 -10 -5	
48 gtg cca gct ctc aat cgc aca ggg gac cca ggg cct ggc ccc tcc atc	209
49 Val Pro Ala Leu Asn Arg Thr Gly Asp Pro Gly Pro Gly Pro Ser Ile	
50 -1 1 5 10	
52 cag aaa acc tat gac ctc acc cgc tac ctg gag cac caa ctc cgc agc	257
53 Gln Lys Thr Tyr Asp Leu Thr Arg Tyr Leu Glu His Gln Leu Arg Ser	
54 15 20 25	
56 ttg gct ggg acc tat ctg aac tac ctg ggc ccc cct ttc aac gag cca	305
57 Leu Ala Gly Thr Tyr Leu Asn Tyr Leu Gly Pro Pro Phe Asn Glu Pro	
58 30 35 40 45	
60 gac ttc aac cct ccc cgc ctg ggg gca gag act ctg ccc agg gcc act	353
61 Asp Phe Asn Pro Pro Arg Leu Gly Ala Glu Thr Leu Pro Arg Ala Thr	
62 50 55 60	
64 gtt gac ttg gag gtg tgg cga agc ctc aat gac aaa ctg cgg ctg acc	401
65 Val Asp Leu Glu Val Trp Arg Ser Leu Asn Asp Lys Leu Arg Leu Thr	
66 65 70 75	
68 cag aac tac gag gcc tac agc cac ctt ctg tgt tac ttg cgt ggc ctc	449
69 Gln Asn Tyr Glu Ala Tyr Ser His Leu Leu Cys Tyr Leu Arg Gly Leu	

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001
 TIME: 13:04:47

Input Set : A:\ES.txt
 Output Set: N:\CRF3\08272001\I931704.raw

```

70          80          85          90
72 aac cgt cag gct gcc act gct gag ctg cgc cgc agc ctg gcc cac ttc 497
73 Asn Arg Gln Ala Ala Thr Ala Glu Leu Arg Arg Ser Leu Ala His Phe
74          95          100          105
76 tgc acc agc ctc cag ggc ctg ctg ggc agc att gcg ggc gtc atg gca 545
77 Cys Thr Ser Leu Gln Gly Leu Leu Gly Ser Ile Ala Gly Val Met Ala
78 110          115          120          125
80 gct ctg ggc tac cca ctg ccc cag ccg ctg cct ggg act gaa ccc act 593
81 Ala Leu Gly Tyr Pro Leu Pro Gln Pro Leu Pro Gly Thr Glu Pro Thr
82          130          135          140
84 tgg act cct ggc cct gcc cac agt gac ttc ctc cag aag atg gac gac 641
85 Trp Thr Pro Gly Pro Ala His Ser Asp Phe Leu Gln Lys Met Asp Asp
86          145          150          155
88 ttc tgg ctg ctg aag gag ctg cag acc tgg ctg tgg cgc tgc gcc aag 689
89 Phe Trp Leu Leu Lys Glu Leu Gln Thr Trp Leu Trp Arg Ser Ala Lys
90          160          165          170
92 gac ttc aac cgg ctc aag aag aag atg cag cct cca gca gct gca gtc 737
93 Asp Phe Asn Arg Leu Lys Lys Lys Met Gln Pro Pro Ala Ala Ala Val
94          175          180          185
96 acc ctg cac ctg ggg gct cat ggc ttc tgacttctga ccttctcct 784
97 Thr Leu His Leu Gly Ala His Gly Phe
98 190          195          797
100 ttogetcccc ccc
103 <210> SEQ ID NO: 2
104 <211> LENGTH: 225
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
108 <400> SEQUENCE: 2
110 Met Asp Leu Arg Ala Gly Asp Ser Trp Gly Met Leu Ala Cys Leu Cys
111          -25          -20          -15
114 Thr Val Leu Trp His Leu Pro Ala Val Pro Ala Leu Asn Arg Thr Gly
115          -10          -5          -1 1 5
118 Asp Pro Gly Pro Gly Pro Ser Ile Gln Lys Thr Tyr Asp Leu Thr Arg
119          10          15          20
122 Tyr Leu Glu His Gln Leu Arg Ser Leu Ala Gly Thr Tyr Leu Asn Tyr
123          25          30          35
126 Leu Gly Pro Pro Phe Asn Glu Pro Asp Phe Asn Pro Pro Arg Leu Gly
127          40          45          50
130 Ala Glu Thr Leu Pro Arg Ala Thr Val Asp Leu Glu Val Trp Arg Ser
131          55          60          65
134 Leu Asn Asp Lys Leu Arg Leu Thr Gln Asn Tyr Glu Ala Tyr Ser His
135 70          75          80          85
138 Leu Leu Cys Tyr Leu Arg Gly Leu Asn Arg Gln Ala Ala Thr Ala Glu
139          90          95          100
142 Leu Arg Arg Ser Leu Ala His Phe Cys Thr Ser Leu Gln Gly Leu Leu
143          105          110          115
146 Gly Ser Ile Ala Gly Val Met Ala Ala Leu Gly Tyr Pro Leu Pro Gln
147          120          125          130
150 Pro Leu Pro Gly Thr Glu Pro Thr Trp Thr Pro Gly Pro Ala His Ser

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001
TIME: 13:04:47

Input Set : A:\ES.txt
Output Set : N:\CRF3\08272001\I931704.raw

```

151      135      140      145
154 Asp Phe Leu Gln Lys Met Asp Asp Phe Trp Leu Leu Lys Glu Leu Gln
155 150      155      160      165
158 Thr Trp Leu Trp Arg Ser Ala Lys Asp Phe Asn Arg Leu Lys Lys Lys
159      170      175      180
162 Met Gln Pro Pro Ala Ala Ala Val Thr Leu His Leu Gly Ala His Gly
163      185      190      195
166 Phe
170 <210> SEQ ID NO: 3
171 <211> LENGTH: 5087
172 <212> TYPE: DNA
173 <213> ORGANISM: Homo sapiens
175 <220> FEATURE:
176 <221> NAME/KEY: misc_feature
177 <222> LOCATION: (137)..(138)
178 <223> OTHER INFORMATION: product = "INTERVENING UNSEQUENCED REGION OF >1KB"
181 <400> SEQUENCE: 3
182 aaactcgcag tgggcctggc ggatgggatt attaaagctt cgcgggagcc gcggctcgcc 60
184 ctcccaactcc gccagcctcc gggagaggag ccgcacccgg ccgcccagc cccagcccca 120
186 tggacctccg agcagggtga aaacccaaac tagccctgct ctctataaca tgacaagcag 180
188 cgccccatct gatactctaa ccgaccaagt cacagccctc caactcaccc ctgctcgcc 240
190 cagacctcac cacatctctg tggactcaaa actcaaccgc actaaatcaa ccaaatccca 300
192 agtctaaact aatctgaaac ttttaaagta accagctcct taaccttaac ctgagccaat 360
194 gcacataata tataccctac ccaaaccccta actgcctttg ccagtcctaa gtgtccactg 420
196 aatctctacc ttggctctca ctgaaaaatcc cagaaaagca tatctcccca ctgcccacat 480
198 cectctctac agcacccaac cctggcctct ggactctggt tatoctggga tgtccaaact 540
200 ctgcagtgcc atcagccaac aagcccgact cgtcaaatgc acctctctcc ctctctgtcc 600
202 ccaccccttg aggctgatgg aaaggccctca ttgaacttga gttccctgag agtgagcact aaatctctct 720
204 aagaacgggg tgaacctcca cactgccacc cttcccttag ttgctctgag agtgagcact aaatctctct 780
206 caataaacc ccacccctaca ctccccacac tcaggaatca cactctagaa tatacccaaa 840
208 actaagcccc ataaaggcagc cgcaccctag tggctctaac ctatacctg ctctctatgg 900
210 gtgagtgctg tcttggcgcc cgcctctctc ctgctctctc ccttagagct gactgtgctc 960
212 agcctgcgag ctctgacatg tctgtctctc caccctctga ctccccctaa gctgcagtgg 960
214 gactggaaga ctggccaggaa ctccatgtac acacatatat atgttggcac acacacagt 1020
216 cccataggcct ggcccgcgtcc ctccatgtac acacagatcc attctcaagt atctactgat 1140
218 gcacacatgc caaagactct ctcaagctgac caaacatata catgcctctc tttctctccc 1200
220 agacactcat cgtgtccaag tctctatctc cccctctctg tcccatctgg tgtcccaacc 1260
222 gcttggcagc gagtgtttcc cctctctcat gacacctgag ggggtgccag ctgctctccc 1320
224 tcaaccccca cccagcccaa ggtggggaca catgctcttc gtccatctctg cccacagggg actgtgggg 1380
226 gttgtgggcc gggccgcgct cgggtgctct gcacctccct gcagtgccag ctctcaatcg 1440
228 gatgttagcg tgcctgtgca gccctctcat ccagaaaaac tatgacctca cccgctacct 1500
230 cacaggggac ccaggggcgt gccctctcat ctatgtgagt atccagcgtg ggaatctggg 1560
232 ggagcaccaa ctccgcagct tggctgggac ccagtctctg cctgtggagg ttctggtaaa 1620
234 agttggggag gagtggaggc ttgggggaaa caccagtctg ctatctctctg 1680
236 tgatgggggt aggaggggct ctttggctcc cccagtcctg gcccaggagc taggcatgtg 1740
238 cctctccctc ttagggtggc ccccaacttc cccactccgt gcccaggagc gcccgccgcc 1800
240 ggcaggcctc gcaccgcctt tggcccatgt gttccctctg tttaaccctg gttgtggtgt ctcttgcgcg 1860
242 tccccctggg ggcgggggaa gtctctctct tttacaccgt gttgtggtgt ctcttgcgcg 1860
244 ggcgggggtt ggtgggggaa gaggggcccc acctccactg cctgcgttcc agctgcctc 1920

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001
TIME: 13:04:47

Input Set : A:\ES.txt
Output Set : N:\CRF3\08272001\I931704.raw

246	tgccccccaga	ctgtggggccc	tgtgtgtctgt	gacccaggagg	ctccctctccc	gtctgcccctt	1980
248	cccatctctag	ctgggcccctc	tagggggggtc	atggggggaag	gggactgtag	ggaacccagg	2040
250	cagttagtgcc	aggggggttta	gggtgtggat	ggaggttatg	ctgtaaggat	ttgggggttgg	2100
252	tccagtaggct	ttccagagagc	ccaggagaga	aggaaggagg	gttggaggag	ccgaggcacc	2160
254	atggggaaacc	ggccccctctc	tcccgtgttc	ctcttccaca	tcccagacc	tactctggag	2220
256	ccagggaag	aaaagggaag	aaggtggcgg	gggagctggc	tccagcccca	ggatacaccg	2280
258	aggaaaattag	tttgtctctg	tgttgtctag	ctgtgtaacc	tcccctctgg	ccctgtcccta	2340
260	tcccaggcct	ctcccctctg	ttctcccttc	tttcccagtt	atacatctcc	ctcatcoott	2400
262	tcccgtggcc	ccagccgcctc	ccccagggtt	tggaaaaggc	tctgcccctt	ttccataacc	2460
264	atgtgtctct	ccatagcctt	ctcctgtccc	tactcatgag	actgcctcca	tttcttctct	2520
266	ctgcaacccct	gtctctatca	gtgtaacccct	tctttcggag	tgttagtgag	taccctgtctc	2580
268	tcccagcccc	ctcagctggg	gggctctggg	gtgtcaagcg	caaatggggc	ttgtgttcca	2640
270	atggggccaat	ctcatctctc	tctgttctct	tgtgcagaaa	accttctgct	cactccactgt	2700
272	ccctctctag	ttcccagacc	ttttctctct	ctggctttcc	ctgccaattt	tctccaagga	2760
274	gtgtgtctaca	ccctctgctc	ccacttctct	tccaccactt	cacttcttaa	ccccctgcaa	2820
276	tctgtgcttcc	agggccccag	aatgttctct	tccaaggtcg	tcaggcaact	ctctgcctca	2880
278	ccagcacagt	ttttgaaagg	ctctctctct	gtgtgtctgt	tttgtagcca	caactgtcag	2940
280	cgtctgtccc	ttctcgaact	ctctctctct	gtgtctctgc	ctctctctgg	ccacctctcta	3000
282	ccctctccagc	ttcttccagg	ttcttctctc	ctctgtctct	ccccccacag	gggcaactctc	3060
284	ccaaagtttgc	ccccaccagc	caatcagcac	gtcttctctg	agcgtcttgc	gcgtctctctc	3120
286	ctctctcttt	ttctacgctt	ctccatttga	gagctcaacca	cgcgcactgc	ttcaactgtc	3180
288	acctgcatac	aaatgatatc	cttattggaa	aaactcaggg	agggcatgaa	caaaagagcc	3240
290	tagcatggag	acaggggccag	tgtcagggga	cacaaaaaat	agaaactttg	ggagcagcta	3300
292	tctccttggt	ggtagccagc	cggctctgccc	ctcctctctc	cccatcacc	ttctcttttc	3360
294	acagctgaac	tacctggggc	cccccttcaa	cagaccagac	ttcaacccctc	ccccgctggg	3420
296	ggcagagact	ctgcccaggg	ccactgttga	cttggaagtg	tggcgaaagc	tcaatgacaa	3480
298	actgcggctg	accagaaact	acgaggcccta	cagccacctt	ctgtgttact	tgcgtggcct	3540
300	caaccgtcac	gctgcacact	ctgagctgcg	cgccacttct	gtggtgtact	gcaccagcct	3600
302	ccaggggctg	ctgggcagca	ttgcggggct	catggcagct	ctgggctacc	caactgcccc	3660
304	gcccgtgctc	gggactgaac	ccacttggac	ttctggccct	gcccacagct	ctctctctca	3720
306	gaagatggac	gacttctggc	tgtgaagga	gctgcagagc	tgggtgtggc	gctggcccaa	3780
308	gagcttcaac	cggctcaaga	agaagatgca	gcctccagca	gtgctcagta	ctctgcaact	3840
310	gggggctcat	ggcttctgac	ttctgacctt	ctcctctctg	ctcccccttc	aaacctctgt	3900
312	cccactttgt	gagagccagc	ctgttatgcc	aacacctgtt	gagccaggag	acagaagctg	3960
314	tgagcctctg	gccctttctc	ggaccggctg	ggcgtgtgat	gcgatcagcc	ctgtctctctc	4020
316	cccactctcc	aaaggtctac	cagagctggg	aggaggtaca	gtaggccctg	ttctgtctctg	4080
318	ttctacagag	aagtcatgct	ctacacactg	tgaagtgggt	caggttgggtg	tcaggtggca	4140
320	cagggcctcc	tgtcttctgc	aggggcccac	accacacatg	ccccagctcc	tcaggtggca	4200
322	catctggagg	gcaggggggt	ggatgggtgt	tgctccctta	ttcccaaatc	actctatata	4260
324	ttggctgccc	caactctctt	tggtggcaat	tctacacaaa	aagagatgag	attaaacagt	4320
326	tccaattcag	gaaacaaaac	gaggtgccct	ataaacacga	agagaaaata	ctgaaagcac	4380
328	caggtgtggg	gtctgcattg	ccagaccagc	gagcttccaa	agcacagagt	ggccaaacaaa	4440
330	aggggtcagg	acagacacga	ccttgccctg	aattgtcttc	cagttattacg	gtgcctcttc	4500
332	accagagctg	agcatcagga	atctgtgggt	tgccaggctg	gggagggcaa	ccataggcac	4560
334	tctgcccctc	ttcccagggt	tttacaatgc	agtagcattt	tggggtgtag	gttggcagct	4620
336	accacagagt	ttctcgaag	gcccccccca	ctcatgactc	taagtgtgtt	gtattaatat	4680
338	ccccaaggcc	ctgcccccca	tttattagat	gatattttat	gcgaagattt	tattcttcta	4740
340	ttattttatt	ggagatgtta	ccagaaactt	agttctcttg	ccccagctca	ccccctctgtg	4800
342	ttacaacata	aaatgcttgc					4860

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001
TIME: 13:04:47

Input Set : A:\ES.txt
Output Set : N:\CRF3\08272001\I931704.raw

```

344 tgctcatcag actcttgcca cccctggctc ccactccctg cttgcctctg gtggagctgc 4920
346 acagagctct gggaagaggc cctcttctc cccgcactgg ggcgatgggc gcacctcaga 4980
348 cttaccactc gctgctgcca ccaccaacc cttgatccct cagtctcccc acacagcttc 5040
350 tgctccaccc aggtttccct caccaccct ttgctaagtc ttctceta 5087
353 <210> SEQ ID NO: 4
354 <211> LENGTH: 819
355 <212> TYPE: DNA
356 <213> ORGANISM: Murine
358 <220> FEATURE:
359 <221> NAME/KEY: CDS
360 <222> LOCATION: (95)..(769)
361 <223> OTHER INFORMATION:
364 <220> FEATURE:
365 <221> NAME/KEY: mat_peptide
366 <222> LOCATION: (176)..()
367 <223> OTHER INFORMATION:
370 <220> FEATURE:
W--> 371 <221> NAME/KEY: mat_peptid OK
372 <222> LOCATION: (176)..(769)
373 <223> OTHER INFORMATION:
376 <220> FEATURE:
377 <221> NAME/KEY: sig_peptide
378 <222> LOCATION: (95)..(175)
379 <223> OTHER INFORMATION:
382 <400> SEQUENCE: 4
383 tattattaaa gcttcgcggg agccgcggct cgcctcccca ctccgccagc ctctggggaga 60
385 ggagccgcgc ccggccgcgc cggcccccag cccc atg gac ctc cga gca ggg gac 115
386 Met Asp Leu Arg Ala Gly Asp
387 -25
389 tgg tgg ggg atg tta gct tgc cta tgc acg gtg ctg tgg cac ctc cct 163
390 Ser Trp Gly Met Leu Ala Cys Leu Cys Thr Val Leu Trp His Leu Pro
391 -20 -15 -10 -5
393 gca gtg cca gct ctt aat cgc aca gga gat cca ggc cct ggc ccc tcc 211
394 Ala Val Pro Ala Leu Asn Arg Thr Gly Asp Pro Gly Pro Gly Pro Ser
395 -1 1 5 10
397 atc cag aaa acc tat gac ctc acc cgc tac ctg gag cat caa ctc cgc 259
398 Ile Gln Lys Thr Tyr Asp Leu Thr Arg Tyr Leu Glu His Gln Leu Arg
399 15 20 25
401 agc tta gct ggg acc tac ctg aac tac ctg ggg ccc cct ttc aac gag 307
402 Ser Leu Ala Gly Thr Tyr Leu Asn Tyr Leu Gly Pro Phe Asn Glu
403 30 35 40
405 cct gac ttc aat cct cct cga ctg ggg gca gaa act ctg ccc agg gcc 355
406 Pro Asp Phe Asn Pro Pro Arg Leu Gly Ala Glu Thr Leu Pro Arg Ala
407 45 50 55 60
409 acg gtc aac ttg gaa gtg tgg cga agc ctc aat gac agg ctg cgg ctg 403
410 Thr Val Asn Leu Glu Val Trp Arg Ser Leu Asn Asp Arg Leu Arg Leu
411 65 70 75
413 acc cag aac tat gag gcg tac agt cac ctc ctg tgt tac ttg cgt gcc 451
414 Thr Gln Asn Tyr Glu Ala Tyr Ser His Leu Leu Cys Tyr Leu Arg Gly

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/931,704

DATE: 08/27/2001

TIME: 13:04:48

Input Set : A:\ES.txt

Output Set: N:\CRF3\08272001\I931704.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:371 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4